

Greater New Orleans Hurricane Storm Surge Risk Reduction System

Leaders Emeritus

September 29, 2010

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Director

Task Force Hope

Mississippi Valley Division

U.S. Army Corps of Engineers



**US Army Corps of Engineers
BUILDING STRONG®**



Mega Program Management

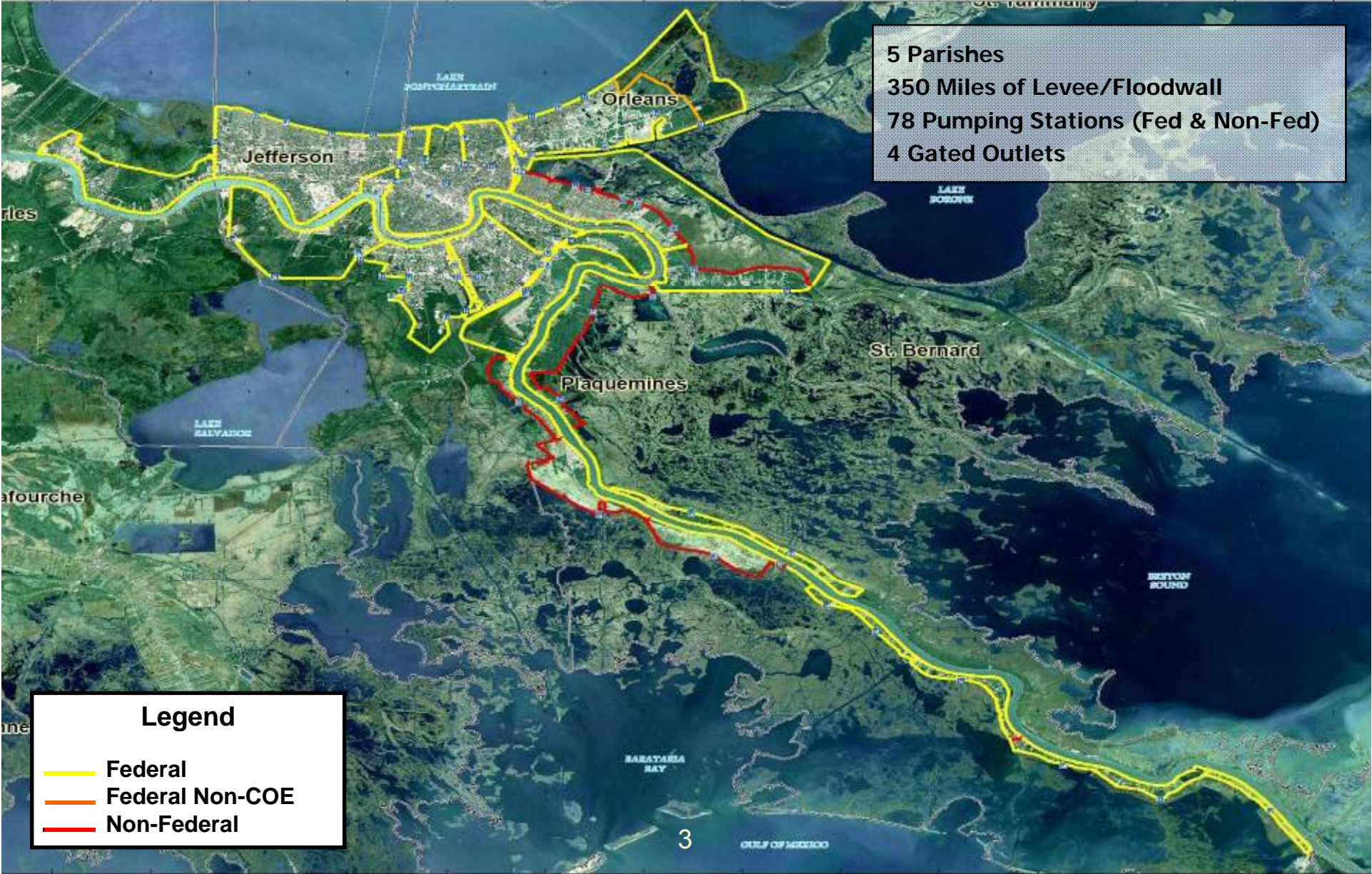
Elements of success

- Program Management (PgM) organization
- Programmatic schedule/milestones
- Risk-based programmatic cost estimate
- Acquisition plan
- Program Management Business Plan (PgMP) documented/published/used
- Execution!: Metrics and Management
- Business governances



Greater New Orleans Area

Hurricane and Storm Damage Risk Reduction System



HSDRRS:

Our Mission and Commitment

- *Repair the damages, making what was there before whole again.*
- *By 1 June 2011, strengthen and improve the system and provide 100-year level of risk reduction capable of withstanding the effects of a storm having a 1% chance of occurring each year.*
- *Current funding level \$14.4 B (fully funded).*
- *Study and recommend solutions to provide higher levels of protection; restore and protect coastal wetlands (LACPR).*



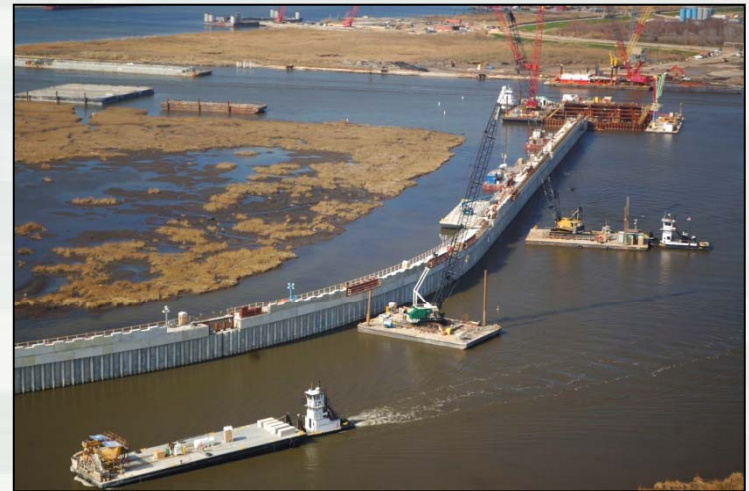
Deliver the Greater New Orleans HSDRRS Mission

Challenges

- Mandate to deliver \$14.6B construction program within 4 yrs
- Intense media/congressional/public scrutiny
- Atmosphere of low trust and credibility
- Form design criteria, program cost estimate, acquire funding
- NEPA compliance
- Enforce comprehensive system approach

Enablers

- Administration / Congressional commitment
- Fully funded program
- National/Regional Corps capabilities
- NEPA Alternate Arrangements
- Disciplined STRATCOM
- Full host of acquisition strategies
- Hungry bidding climate



Best Practices: System Program Management

- Acquisition Strategy
 - ▶ Design Build / Cost Plus Contracts
 - ▶ Best Value Source Selection
 - ▶ Early Contractor Involvement (ECI)
 - ▶ Program Management Support Contract
- Construction Materials
 - ▶ Government Furnished Borrow
 - ▶ Supply Contracts for Sheet Piles and Borrow
- Improved Techniques
 - ▶ Value Engineering – systems study complete
 - ▶ Pile Load Tests – in advance of contract award
 - ▶ Press Pile
 - ▶ Deep soil mixing
- Earned Value Management System (EVMS)
- Leverage National & Regional Resources
- Independent External Peer Review



How We Deliver

U.S. ARMY CORPS OF ENGINEERS

Mississippi Valley
Division
MG Michael Walsh

Task Force Hope

Karen Durham-Aguilera (SES)

St. Paul
District

Rock Island
District

St. Louis
District

Vicksburg
District

Memphis
District

New Orleans
District

Protection
Restoration Office
COL Ed Fleming

Hurricane
Protection Office
COL Robert Sinkler

Air Force Center for
Engineering and
Environment (AFCEE)

Engineer Research
and Development
Center (ERDC)

Walla Walla District
Cost Center of
Expertise

Corps Planning
Centers of
Expertise

Omaha District
Rapid Response

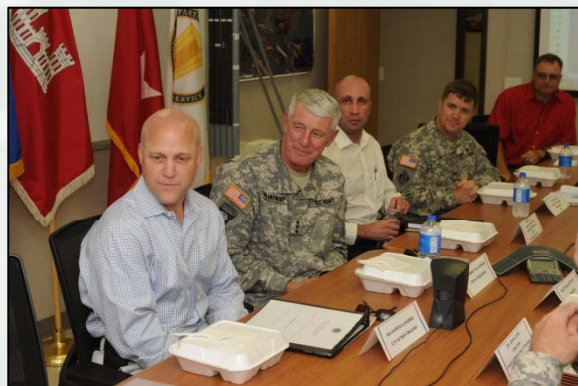
Baltimore District
Planning CX – Coastal
and Storm Damage
Reduction, lead for IEPR

(Examples) USACE Reachback

Program Stakeholders

Local

- People of Metro New Orleans Area
- City of New Orleans
- 5 Parishes
- Sewerage & Water Bd.
- Business Community
- Neighborhood Associations
- And many more.....



State

- State of Louisiana
- Governor's Office
- CPRA
- LA DOTD
- DNR
- Levee Authorities
- State Insurance Commissioner

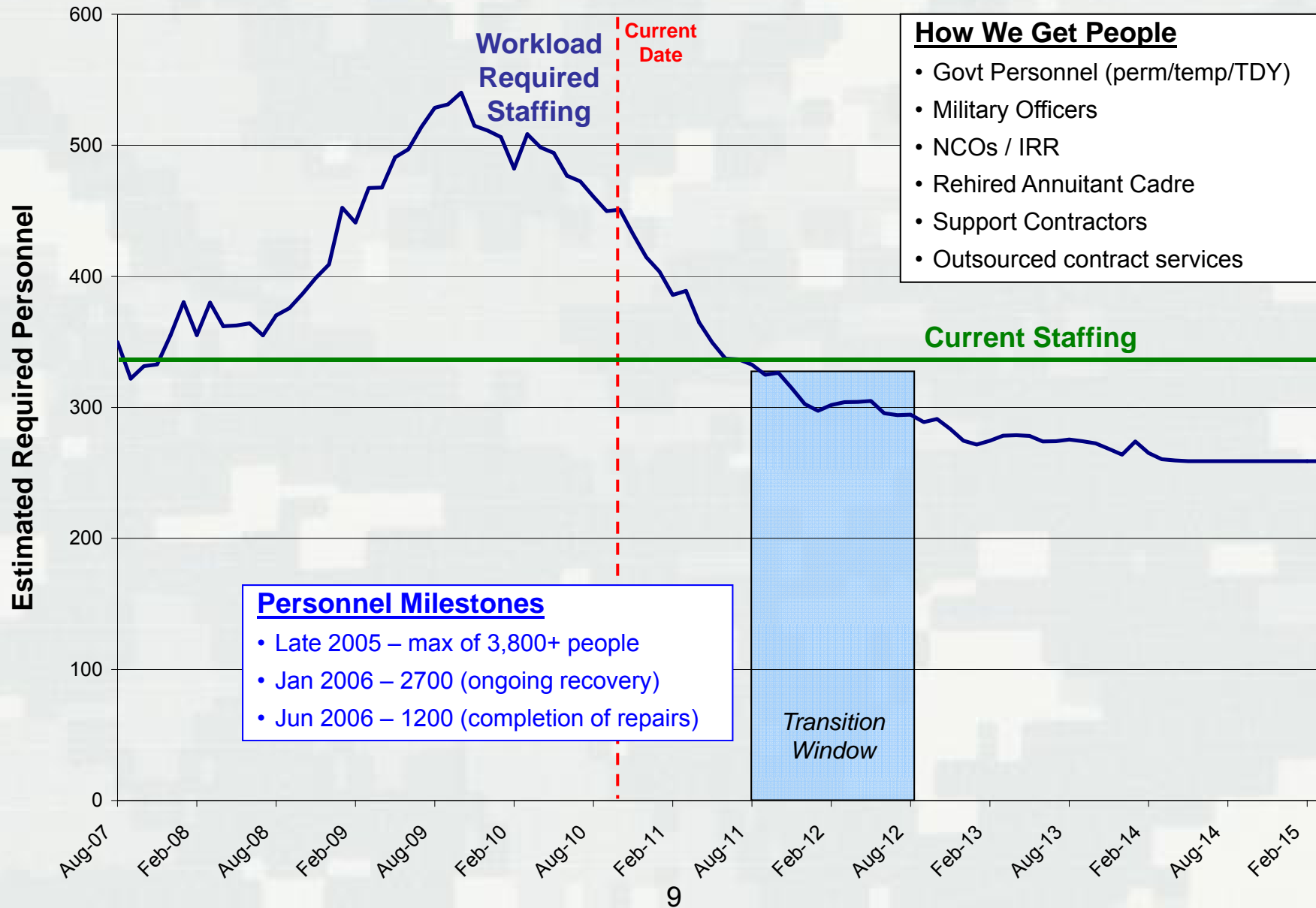


National

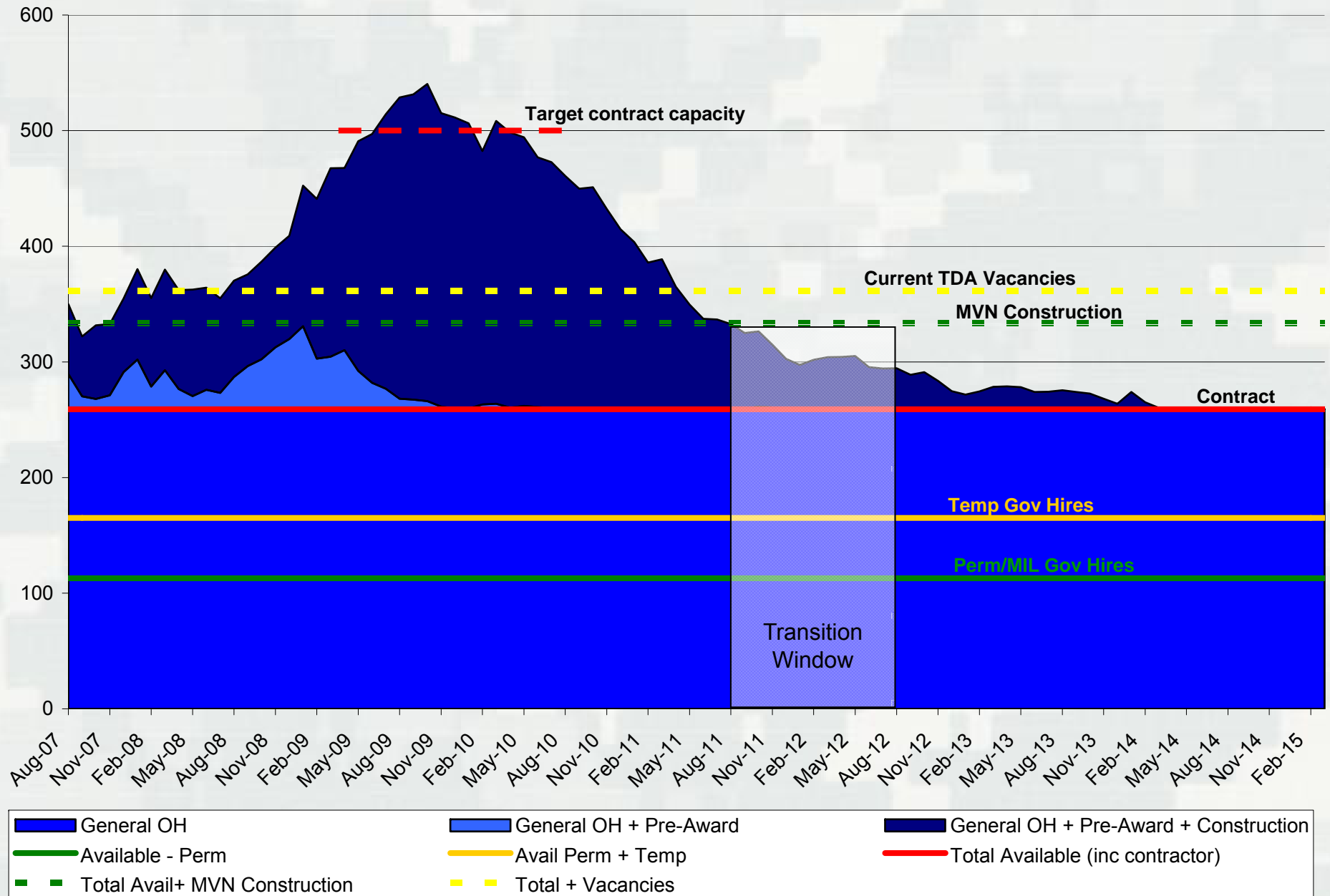
- Dept. of Homeland Security
- OMB
- CEQ
- Federal Principles
- The White House
- The Congress



Resource Analysis



Resource Analysis

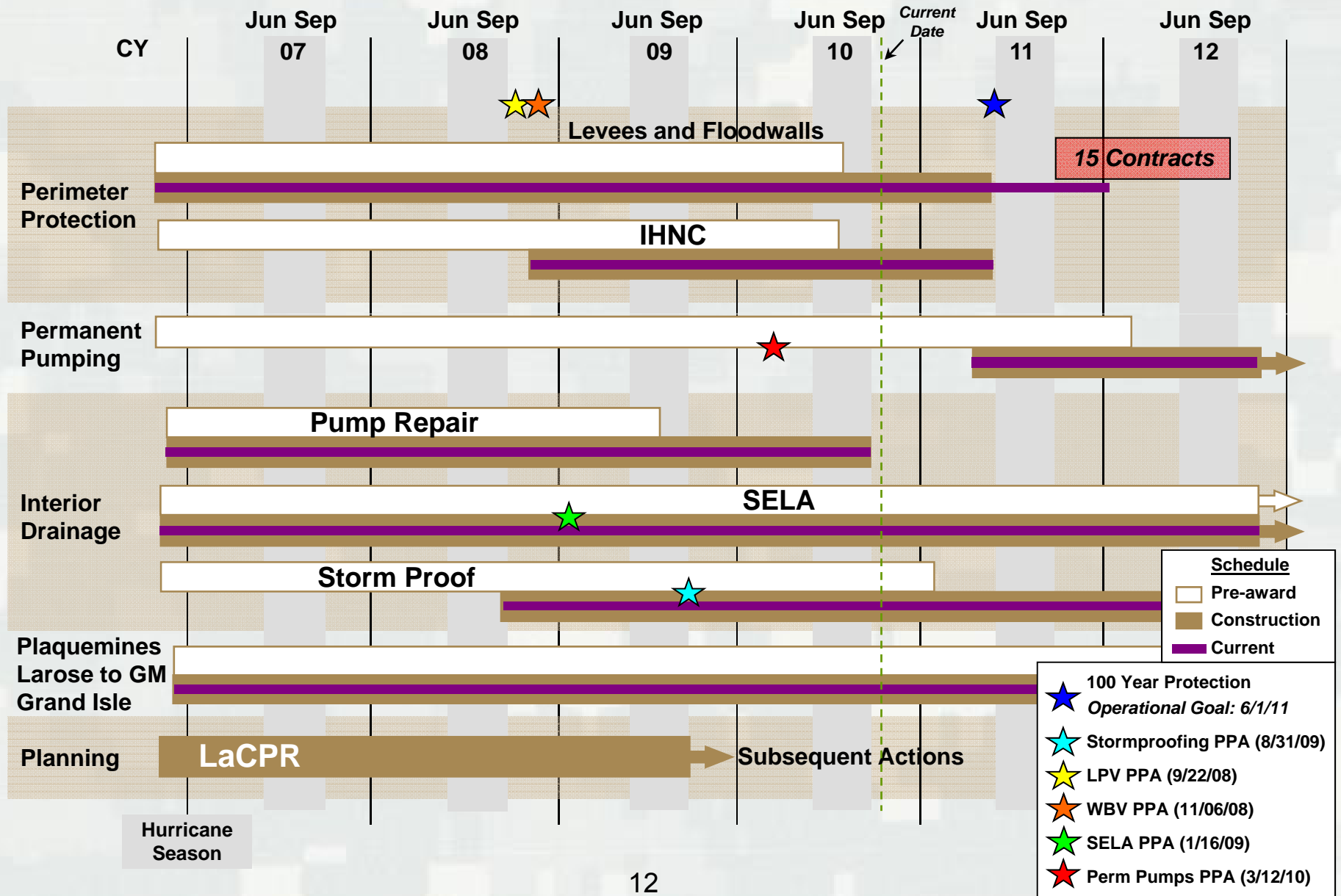


System Program Management Support

- Program management
- Project management
- Construction management
- Coastal restoration
- Environmental compliance
- General engineering
- Geographic information system (GIS) analysis
- Market analysis, cost estimating, and scheduling
- Public affairs and community outreach



System Programmatic Schedule



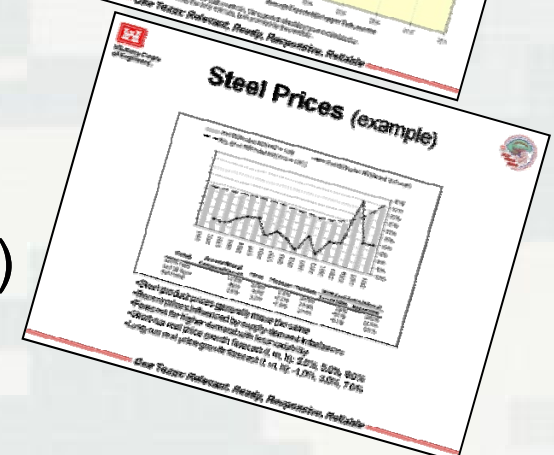
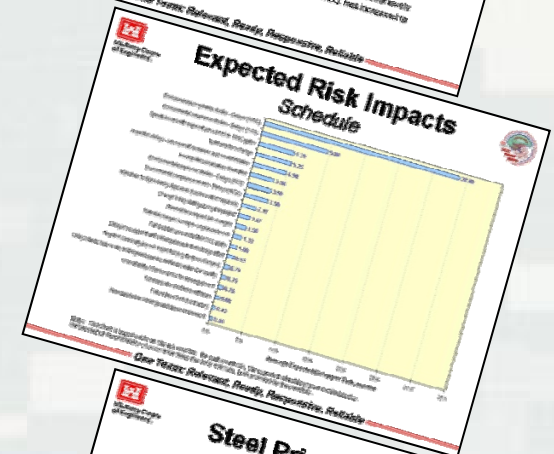
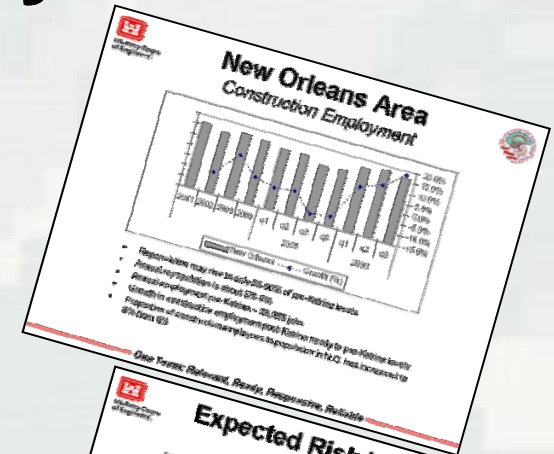
“STATE OF THE ART”

Repeatable & Sustainable



Market and Risk Analysis

- Performed by World Class industry experts
- Analyzed key materials, equipment and labor
- Researched market prices
- Projected future costs
- Assessed potential for supply constraints
- Cost & quantity uncertainties captured and analyzed
- Developed Risk Register (cost & schedule risk)
- Risk items linked to specific affected activities



Cost to Complete

- **Key Features:**

- ▶ Repair, restore and construct authorized projects and build 100-year level of protection System
- ▶ Unprecedented estimating, engineering and construction processes, aggressive schedule
- ▶ Risk Analysis and Market Analysis by industry experts
- ▶ Independent and external peer review by industry experts
- ▶ Manage as a SYSTEM

- **Reflects:**

- ▶ lessons learned from Interagency Performance Evaluation Task Force
- ▶ state of the art storm projection modeling,
- ▶ risk and reliability analysis,
- ▶ updates for levee and floodwall design criteria
- ▶ new datum and
- ▶ sea level rise



Industry Interaction

- **Industry Days and Small Business Days:**
Upcoming projects, concepts and innovations
- **Innovative Workshops:**
Forums to discuss and gather information from industry to determine the best engineering solution



HSDRRS Acquisition Plan

Acquisition Strategy	# Contracts	Contract Type
Set Asides	175	Levees, floodwalls, pump station repair
Unrestricted	92	Levees, floodwalls, SELA
Design Build	5	Pump Installation, Permanent Pumps, IHNC Lake Borgne
ECI	6	Large Floodwalls West Closure Complex IHNC Seabrook Surge Barrier
Supply	4	Borrow, Pumps, Steel Piles, H Piles

Numbers above do not include the contracts for the initial repair work.



HSDRRS Program Mgmt Plan

Greater New Orleans Area Hurricane and Storm Damage Risk Reduction System

Program Management Plan Update

South Louisiana Area



**US Army Corps
of Engineers®**

Mississippi Valley Division

Edition June 2010

This Program Management Plan and Appendices is available on the MVN intranet website at:

https://inet.mvn.usace.army.mil/TFH/Prog_Mgmt_Plan/

Hurricane and Storm Damage Risk Reduction System

i




Dashboard

HSDRRS Dashboard

Home Add-Ins Acrobat

Clipboard Font Rich Text Records Sort & Filter Find

PROCUREMENT INTEGRITY

 **US Army Corps of Engineers**
HSDRRS Dashboard

BUILDING STRONG.


To Mission Complete
1 June 2011

DAYS	HOURS : MINUTES	SECONDS
307	12 : 43	39

PROCUREMENT INTEGRITY
Program and Project Management Support for
US Army Corp of Engineers, New Orleans District

This is in accordance with section 27 of the Office of Federal Procurement Policy Act (the Procurement Integrity Act (41 U.S.C.423), any person acting for or on behalf of, or who is advising or has advised the United States with respect to, a Federal agency procurement, must not, other than as provided by law, knowingly disclose procurement sensitive information or source selection information before the award of a Federal agency procurement contract, to which the information relates. Such as the information contained with-in this database application.

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US Army Corps of Engineers

HSDRRS Dashboard

BUILDING STRONG®

CONTRACT INFO.	BUDGET	REPORTS	ORGANIZATIONS	DOCUMENT ARCHIVE	SUGGESTIONS	REFRESH/EXPORT DATA
PRO Contract Details HPO Contract Details	Budget Menu	Commanders Menu Milestone Report Menu HSDRRS Report Menu	Construction Division - RMS Contracting Division HSDRRS Relocations Rel. Real Estate Module	Link Master	Suggestions Acronyms	Refresh P6 Data P6 Export Red Zone PAO Excel Export

My Documents Directory



Commanders Report Menu

- * 30,60,90 Contract Award Report in X days
- * 30,60,90 Contract Award Report by date range
- * Contract Schedule Slip Report sorted by award date and construction complete date
- * Contracts Completing after June 1, 2001 report
- * (5) Milestone view for PRO contracts
- * PRO Measures Chart
- * Bow Wave - January 1, 2009
- * Bow Wave - June 1, 2009

The screenshot displays the Microsoft Office Word ribbon at the top, followed by the application title bar "HSDRRS Dashboard". Below this is a navigation bar with "Main Menu" and "Budget Menu" tabs. The main content area features the US Army Corps of Engineers logo and the heading "US Army Corps of Engineers HSDRRS Dashboard - Budget Menu". To the right is the slogan "BUILDING STRONG®".

The dashboard is divided into two primary sections:

- Program Cost:** A table listing various cost categories such as "Projects HPO & PRO", "AE-Actual Expenditures", "FE-Future Expenditures", etc., with a total program value of \$14,813,644,051.00. It includes options to "View Details of Program Costs" and "Export Program Data to Excel".
- Projects Basic Cost:** A section showing costs for "PRO" and "HPO" projects, with a "TOTAL" row. It provides links to view details for each project type and all details.

A sidebar on the right titled "My Documents Directory" contains a folder icon. Below the main sections is a "BUDGET LINE ITEM REPORTS" section with a filter dropdown set to "PRO" and a list of report types like "Budget Line Item Report", "Budget Summary Report by CCS", etc., each accompanied by selection icons.

HSDRRS Dashboard

_ □ ×

Home Add-Ins Acrobat

Clipboard

Cut
 Copy
 Paste

Font

Rich Text

Records

Refresh
 Save
 Delete

Sort & Filter

Selection
 Advanced
 Toggle Filter

Find

Replace
 Go To
 Select

Main Menu Commanders Report Menu

US Army Corps of Engineers

HSDRRS Dashboard - Commanders Report Menu

BUILDING STRONG.

TYPE OR SELECT # OF DAYS
 Contracts to be awarded in the next: Days

PRO HPO All

TYPE OR SELECT DATE RANGE

to

Please fill in Polder to Filter by Polder #. Leave blank for all.

POLDER

Contracts awarded / to be awarded by Date Range:

Contracts advertised / to be advertised by Date Range:

Contracts awarded in the Last (7) days:

Contracts advertised in the Last (7) days:

Contracts awarded by Date Range: (Short Version)

Right of Entry by Date Range: (Actualized Only)

Right of Entry by Date Range: (Advertised but ROE not complete)

PRO HPO All
PRO HPO All
PRO HPO All
PRO HPO All
PRO HPO All
PRO HPO All
PRO HPO All

(Does Not use Polder Filter)
 (Does Not use Polder Filter)
 (Does Not use Polder Filter)

My Documents Directory

Commanders Report Menu 2

REPORTS-CHARTS

Award Date Bow Wave - January 1, 2009 BL

Award Date Bow Wave - October 6, 2009 BL

Right of Entry Bow Wave - October 6, 2009 BL

June 2011 Report

June 2011 Form

Construction Contract Status Counts

Design Contract Status Report

Contract Schedule Slip Report - Sorted by Award Date

Contract Schedule Slip Report - Sorted by Const. Comp. Date

PRO (5) Milestone View

HPO & PRO (5) Milestone View

PRO Measures Chart (Oct 2009 - March 2010)

PRO Measures Chart (April 2010 - September 2010)

Export Award Data to Excel Sheet

Budget at Award Report

Construction Modifications Summary Report

Steel Supply Award Report

All Construction Contractor Award Amounts

PRO

22

Earned Value

LPV 109.02a2

LPV-109.02a2

RMS No: B2000923

LPV 109.02a2, Lake Pontchartrain and Vicinity, Drainage Blanket, South Point to CSX Railroad, Orleans Parish, LA

Contract No: W912P8-09-D-0049 0003

Prime Contractor: B.I.S Services L.L.C

1. Award Amount:	\$25,622,185	Cost Growth:
2. Modifications:	\$753,566	(2/1)*100
3. Award + Mods:	\$26,375,751	<u>2.94%</u>

Status

4. Original Duration - Days (RMS)	180	Schedule Growth:
5. Current Duration - Days (RMS)	243	((5-4)/4)*100
6. Progress Physical Complete-Baseline (RMS):	100.00 %	<u>35.00%</u>
		BL Schedule Type:
		<u>Contractors Schedule</u>
	<u>Scheduled</u>	<u>Actual</u>
7. Progress Physical Complete (RMS):	97.00 %	99.00 %
8. Placement Financially Complete (RMS):	91.14 %	91.14 %

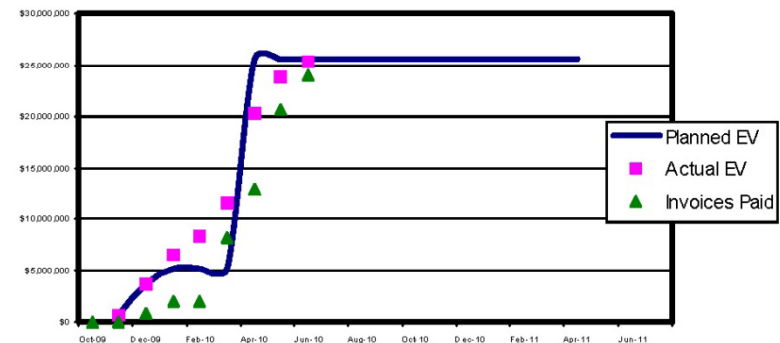
Milestones

	<u>Current</u>	
Award Date: (P6)	10/23/2009	A
NTP Date: (P6)	10/30/2009	A
100 Year: (P6)	6/18/2010	
Contract Required Completion (RMS)	6/30/2010	

Scope: (RMS)

Work consists of supplying and installing approximately 1,000,000 CY of compacted select sand embankment and related work. South Point to I-10 and HWY 90 to CSX Railroad is to be completed in 120.

Earned Value



Earned Value \$25,365,963
Planned Value \$25,622,185
Invoices Paid \$24,037,960

Data as of: 6/1/2010
SPI: (EV/PV) 1.0
CPI: (EV/AE) 1.1

Modifications (RMS)

			<u>Pending Mod Age</u>	<u>#</u>	<u>Add. Time</u>
Executed Mods.	11	\$753,566	Mods. <=30 Days		
Pending Mods.			Mods. 31-60 Days		
Total Mods.			Mods. 61-90 Days		
P6 Scheduled CC Date:	6/18/2010		Mods. >90 Days		
			No Date		



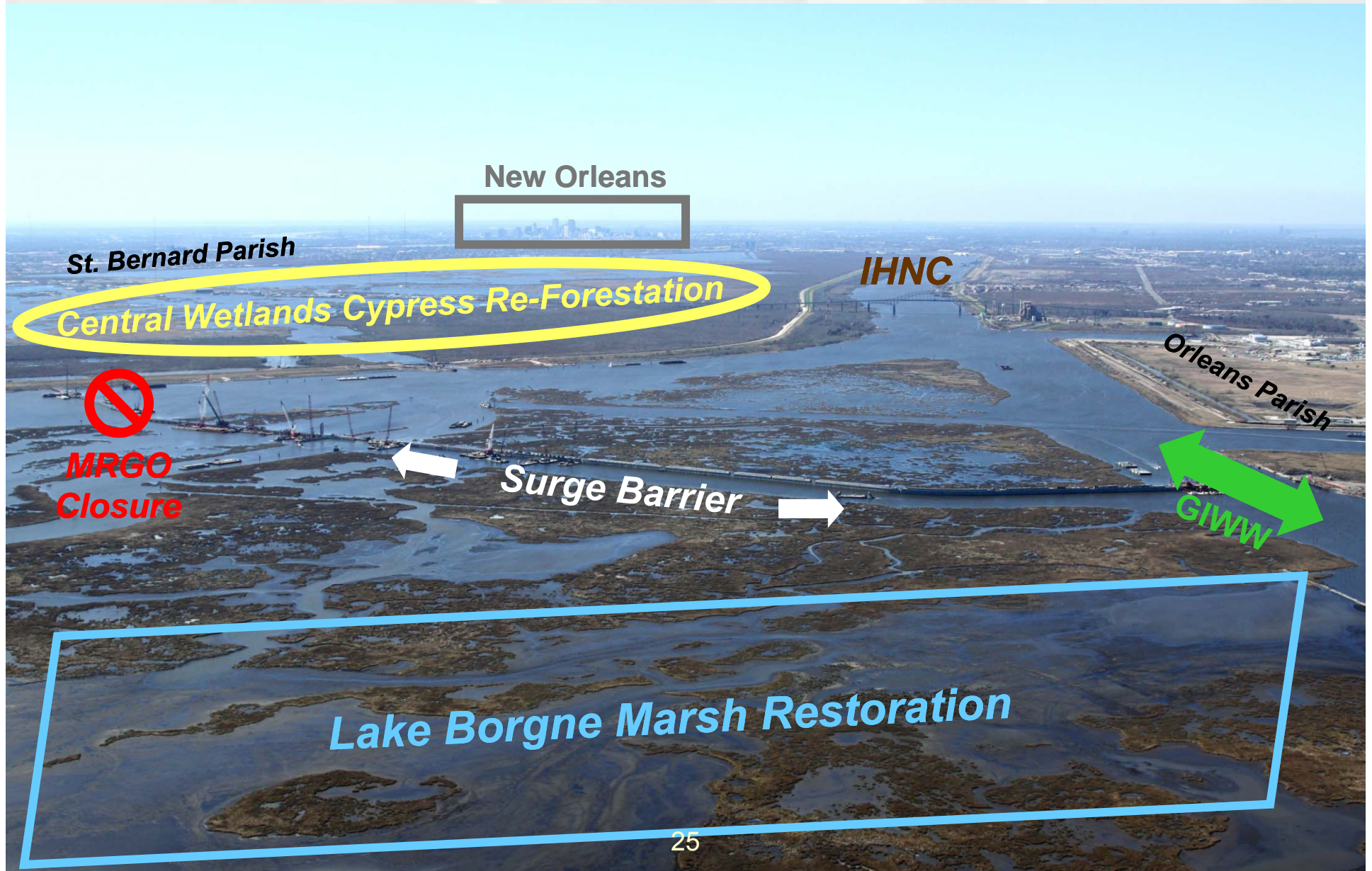
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HSDRRS Program Mgt Governance

- Bi-weekly progress execution meetings
- CCIR (Commander's Critical Information Report)
 - ▶ Forecast impact to program cost, schedule
- Monthly Program Review Board
 - ▶ Chaired by TFH Director (SES) and 2 Commanders
 - ▶ Program trends, status, indicators, milestones
- Change Control Requests
 - ▶ Any programmatic impact to cost, schedule
- Monthly Executive In Progress Review (IPR)
 - ▶ IPR to MVD Commanding General
 - ▶ IPR to HQ USACE Director of Civil Works, Deputy Commanding General, ASA(CW) reps.



The Big Picture



HSDRRS Construction Status

- *Total expected construction contracts: ~369*
- *Overall Program Estimate: ~\$14.6B*
- *Total Obligations to date: ~\$9.0B*
- *Total Obligations to Small Businesses: ~\$2.2B*
- *Awarded: 279 construction contracts worth \$7.2B*
- *Ongoing: 107 construction contracts worth \$5.8B*
- *Complete: 172 construction contracts worth \$1.4B*
- *Remaining: 90 construction contracts worth \$2.5B*

2010

- *Plan to award 79 contracts at a value of \$2.4B*
 - ▶ *IHNC Seabrook Surge Barrier – awarded*
 - ▶ *Levees and Floodwalls*
 - ▶ *Pump Station Storm Proofing*
 - ▶ *SELA interior drainage*



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IHNC Lake Borgne Surge Barrier

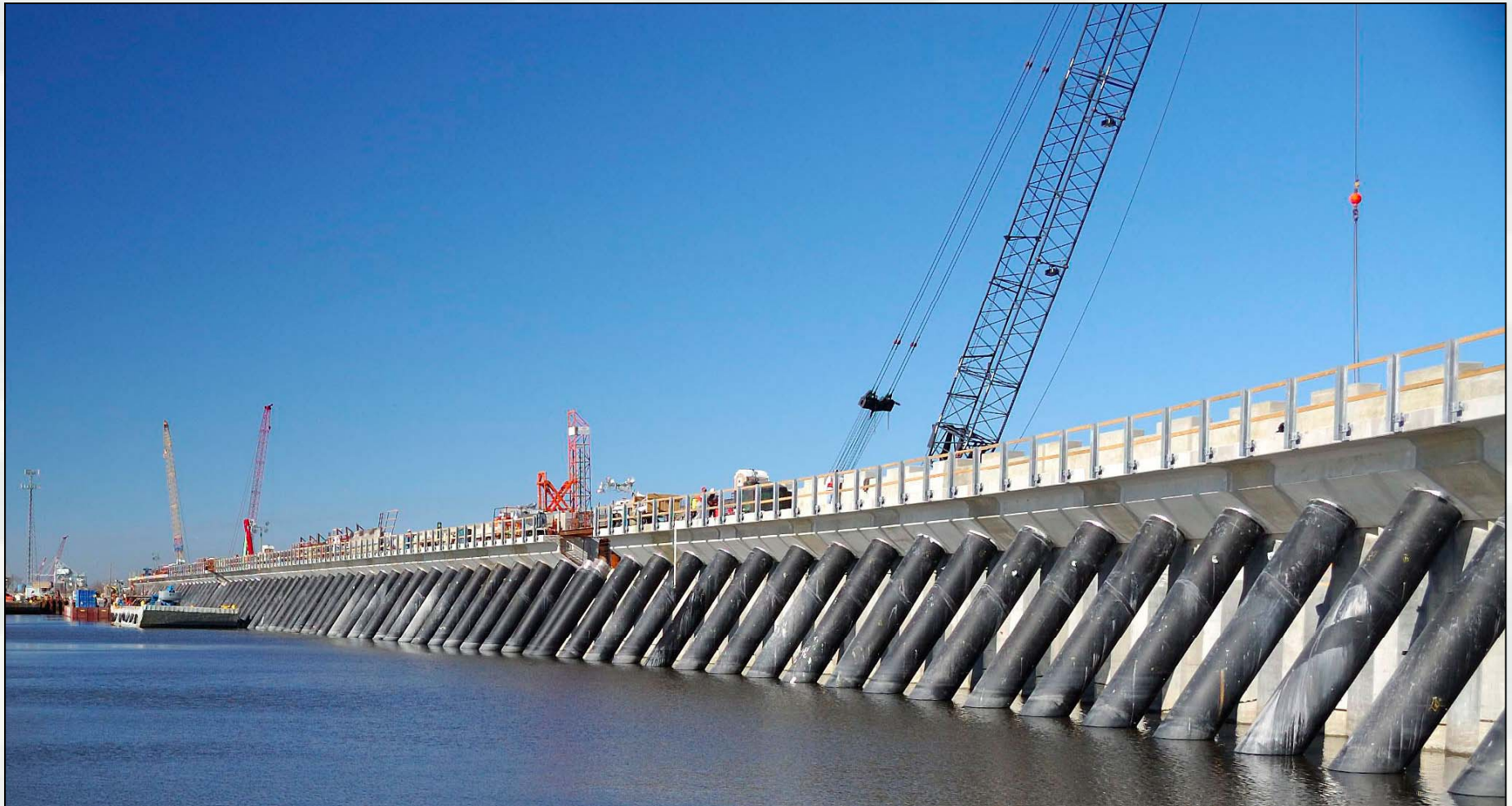
\$1.3 B Project



IHNC Lake Borgne Surge Barrier / NOE Tie-In



IHNC Lake Borgne Surge Barrier



IHNC Lake Borgne Surge Barrier



New Orleans East

Tie-In Floodwall



New Orleans East

Surge Barrier Tie-In



St. Bernard

Tie-in Floodwall



St. Bernard Floodwall



West Closure Complex

\$1 B Project



West Closure Complex



West Closure Complex



West Closure Complex



New Orleans East

Levee Blanket



Strategic Communication

- Key Messages
- Talking Points
- Q's & A's
- Fact Sheets
- Media Kits
- ERDC Tours
- Internal Risk Communication Training
- Public Outreach: Ongoing Focus Group Briefs
- Media Backgrounders



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Challenges Ahead

- Deliver the Mission!
- Turnover to Non federal sponsor
- Environmental Mitigation
- Levee Certification
- Future O&M Requirements
- Implement Best Practices across USACE



Questions / Discussion

